



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,355	04/04/2002	Antti Toskala	915.399	2321

4955 7590 06/09/2004

WARE FRESSOLA VAN DER SLUYS &  
ADOLPHSON, LLP  
BRADFORD GREEN BUILDING 5  
755 MAIN STREET, P O BOX 224  
MONROE, CT 06468

EXAMINER

NGUYEN, JOSEPH D

ART UNIT	PAPER NUMBER
----------	--------------

2683

8

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/009,355

Applicant(s)

TOSKALA, ANTTI

Examiner

Joseph D Nguyen

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 20 recites the limitation "said first coding" in line 1. There is insufficient antecedent basis for this limitation in the claim. The claim needs to change to depend on claim 19. Appropriated correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6, 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kumar et al. (6,073,021).

Art Unit: 2683

Regarding claim 1, Kumar et al. discloses a method of transmitting signals from a plurality of first stations (#12, #14 fig. 1) to the same second station (#11 fig. 1), said method comprising the steps of:

a) transmitting first signals comprising a first communication and first associated information from one of said plurality of first stations to said second station (abstract, #12 and #11 fig. 1, col. 3 lines 36-48);

b) transmitting second signals comprising said first communication, a second communication and second associated information, said second associated information differing at least partially from said first associated information (different phase offsets to identify particular base stations which means the information from the first and second base stations are at least partially different (phase offsets) to distinguish one base station from another), from another of said plurality of first stations to said second station (abstract, #14 and #11 fig. 1, col. 3 lines 36 thru col. 4 line 5, and col. 5 lines 7-25); and

c) receiving at said second station said first and second signals, wherein said second station processes said first and second signals in accordance with the first and second associated information (abstract, fig. 1-4, col. 3 lines 36-64, col. 5 lines 7-25, and col. 6 line 55 thru col. 2).

Regarding claim 2, Kumar et al. further discloses a method as claimed in claim 1, wherein said first communication comprises speech (voice) (col. 4 lines 35-61).

Art Unit: 2683

Regarding claim 3, Kumar et al. further discloses a method as claimed in claim 1, wherein said first communication comprises signaling information (handoff command message) only (col. 3 lines 36-64).

Regarding claim 4, Kumar et al. further discloses a method as claimed in claim 1, wherein said first communication is provided on dedicated channels (assigned channel) (col. 3 lines 36-64).

Regarding claim 5, Kumar et al. further discloses a method as claimed in claim 1, wherein said second communication is data (col. 4 lines 49-61).

Regarding claim 6, Kumar et al. further discloses a method as claimed in claim 1, wherein said second communication is provided in a shared channel (the channel is used for voice and data) (col. 4 lines 49-61).

Regarding claim 9, Kumar et al. further discloses a method as claimed in claim 1, wherein said first and/or said second associated information comprises first information associated with the first communication and second information associated with the second communication (col. 3 lines 36-64).

Regarding claim 10, Kumar et al. further discloses a method as claimed in claim 1, wherein first and second associated information comprise the same information (handoff message) in respect of the first communication (col. 3 lines 36-64).

Regarding claim 11, Kumar et al. further discloses a method as claimed in claim 1, wherein one of said first and second stations comprises a base station (#12 fig. 1).

Regarding claim 12, Kumar et al. further discloses a method as claimed in claim 1, wherein one of said first and second stations comprises a mobile station (#11 fig. 1).

Art Unit: 2683

Regarding claim 13, Kumar et al. further discloses a method as claimed in claim 1, wherein said first and second stations communicate using the code division multiple access technique (col. 4 lines 64-65).

Regarding claim 14, Kumar et al. further discloses a method as claimed in claim 13 wherein said first and second communications use different spreading codes (TDMA) (col. 4 line 62 thru col. 5 line 25).

6. Claims 17-19, 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Sundelin et al. (6,144,861).

Regarding claim 17, Sundelin et al. discloses a network (fig. 1) comprising:

a) a plurality of first stations (#16, 18, 20, 22, 24 fig. 1) and a plurality of second stations (#28, 30 fig. 1), each of said first stations being connected to a control element (fig. 1), wherein at least one of said first stations is connected to one control element (fig. 1) and at least one of the first stations being connected to a different control element (#22 and 14 fig. 1), wherein, in a first mode, when a second station (#28 fig. 1) is in communication with a plurality of first stations controlled by the same control element (#28 and 12 fig. 1), the first stations transmit identical control information to said second station (abstract, fig. 1, col. 5 lines 16-59) and, in a second mode, when a second station (#30 fig. 1) is in communication with a plurality of first stations (#20, 22 fig. 1) which are controlled by a plurality of different control elements (#12, 14 fig. 1), the control information transmitted by said first stations to said second station is different (fig. 1, col. 6 lines 26-51).

Art Unit: 2683

Regarding claim 18, Sundelin et al. further discloses a network as claimed in claim 17, wherein said control information being used by said second station it said first and second modes is to control the processing carried out by the second station in respect of signals received from said plurality of first stations (abstract, fig. 1, col. 4 line 62 thru col. 6 line 51).

Regarding claim 19, Sundelin et al. further discloses a network as claimed in claim 17, wherein said control information is in accordance with a first coding in the first mode and in accordance with a second coding in the second mode (col. 1 lines 26-38, and col. 5 lines 16-35).

Regarding claim 23, Sundelin et al. discloses a method of transmitting signals from a plurality of first stations to the same second station (abstract, fig. 1-5), said method comprising the steps of:

a) transmitting first signals including first associated information (power control) (abstract, #16, 18, 20 and 28 fig. 1, col. 4 line 62 thru col. 5 line 59) and from one of said plurality of first stations (#16, 18, and 20 fig. 1) to said second station (#28 fig. 1);

b) transmitting second signals including second associated information, differing at least partially from-said first associated information from another of said plurality of first stations to said second station (abstract, #20, 22 and 30 fig. 1, col. 4 line 62 thru col. 6 line 50), any data content of said second signals at least partially differing from any data content of said first signals (col. 6 line 25 thru col. 7 line 67); and

c) receiving at said second station said first and second signals, wherein said second station processes said first and second signals in accordance with the first and

Art Unit: 2683

second associated information (mobile processes handover) (abstract, fig. 1, col. 4 line 62 thru col. 7 line 67).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (6,073,021) in view of Blasiak et al. (5,711,004).

Regarding claim 7, Kumar et al. further discloses a method as claimed in claim 1, wherein said first and/or said second associated information comprise information for handoff (col. 3 lines 36-64). However, Kumar et al. does not specifically disclose associated information comprise the information on the rate of the respective first and second signals.

Blasiak et al. teaches associated information comprises the information on the rate of the respective first and second signals (col. 2 lines 17-26, col. 4 lines 7-67, col. 5 lines 42-65). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Kumar et al. system with the teaching of Blasiak et al. of information on rate in order to determine the handoff more efficient.

Regarding claim 8, Kumar et al. further discloses a method as claimed in claim 1, wherein said first and/or said second associated information comprise Code Division



Art Unit: 2683

Multiple Access technique (CDMA) and PN (col. 4 line 62 thru col. 5 line 25). However, Kumar et al. does not specifically disclose associated information comprise at least one code word.

Blasiak et al. teaches first and /or second associated information comprises at least one code word (col. 4 lines 25-54). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Kumar et al. system with the teaching of Blasiak et al. of code word in order to determine the candidate for handoff and to minimize message interruptions during a hand off.

9. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. 6,073,021) in view of Widegren et al. (6,374,112).

Regarding claim 15, Kumar et al. further discloses a method as claimed in claimed in claim 1, wherein at least two of said first stations are connected to control element (#12, #14 fig. 1, and #45 fig. 4, and fig. 5), said control elements defining the first and/or second associated information (col. 6 line 55 thru col. 8 line 30). However, Kumar et al. does not specifically disclose first stations are connected to different control elements.

Widegren et al. teaches first stations are connected to different control elements (# 24 fig. 1). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Kumar et al. system with the teaching of Widegren et al. of different control elements (Radio Network Controllers (RNC)) in order to control the handoff communication.

Regarding claim 16, Kumar et al. further discloses a method as claimed in claim 15, wherein said elements comprise the MSC (#16 fig. 1). However, Kumar et al. does not specifically disclose wherein said elements comprise radio network controllers.

Widegren et al. teaches the elements comprise radio network controllers (#26 fig. 1). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Kumar et al. system with the teaching of Widegren et al. of Radio Network Controllers (RNC) in order to control the handoff communication.

10. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sundelin et al. (6,144,861) in view of Nakagaki (6,456,860).

Regarding claim 20, Sundelin et al. further discloses a network as claimed in claim 17, said coding has number of bits (col. 6 lines 25-64). However, Sundelin et al. does not specifically disclose wherein said first coding has a first number of symbols available using a first number of bits and said second coding has a second number of symbols available using a second number of bits, wherein said first number of symbols is greater than said second number of symbols.

Nakagaki teaches wherein said first coding has a first number of symbols available using a first number of bits and said second coding has a second number of symbols available using a second number of bits, wherein said first number of symbols is greater than said second number of symbols (fig. 6-10, col. 2 line 37 thru col. 4 line 37). Therefore, it would have been obvious to one ordinary skilled in the art at the time

Art Unit: 2683

the invention was made to modify the Sundelin et al. with the teaching of Nakagaki of number symbols and bits in order to control the handover.

Regarding claim 21, Sundelin et al. further discloses a network as claimed in claim 17, wherein the control information. However, Sundelin et al. does not specifically disclose the control information comprises a first number of code words in the first mode and a second number of code words in the second mode, said first number of code words being less than said second number of code words.

Nakagaki teaches the control information comprises a first number of code words in the first mode and a second number of code words in the second mode, said first number of code words being less than said second number of code words (abstract, fig. 1-10, col. 8 line 30 thru col. 48). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Sundelin et al. with the teaching of Nakagaki of comparing the number of code words in order to control the handover.

Regarding claim 22, Nakagaki further discloses a network as claimed in claim 21, wherein the number of bits defining the or each code word in the first mode is different to that of the or each code word in the second mode (col. 9 lines 36-48, col. 15 line 49 thru col. 16 line 67). Therefore, it would have been obvious to one ordinary skilled in the art at the time the invention was made to modify the Sundelin et al. with the teaching of Nakagaki of comparing the number of code words in order to control the handover.

11. Any response to this action should be mailed to:

Art Unit: 2683

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

703 308-9051, (for formal communication intended for entry)

Or:

(703) 305-9509 (for informal or draft communications, please label  
"PROPOSED" OR "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA. Sixth floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D Nguyen whose telephone number is (703) 605-1301. The examiner can normally be reached on 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Joseph Nguyen



Jun. 1, 2004



WILLIAM TROST  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600